

# Notice of Allowability

Application No.

09/827,800

Examiner

Cicely Ware

Applicant(s)

IMAI ET AL.

Art Unit

2634

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 9/09/2005.
2. ☒ The allowed claim(s) is/are 1-32, 57-62, renumbered as 1-38 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 1
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 8/31/2005 was filed after the mailing date of the 1<sup>st</sup> Action on 7/12/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

**I. WHAT IS CLAIMED IS:**

a. Cancel claims 33-56.

Applicant submitted an Election/Restriction on 5/04/2005. Applicant submitted all claims in error. Applicant elected claims 1-32 and 57-62 without traverse. Therefore, this application is in condition for allowance except for the presence of claims 33 to 56 non-elected without traverse. Accordingly, claims 33-56 are hereby cancelled.

b. Claim 27, line 17, delete "and SIR", insert "and signal to interference power ratio (SIR)".

c. Claim 29, line 15, delete "and SIR", insert "and signal to interference power ratio (SIR)".

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d. Claim 57, line 9, delete "and SIR", insert "and signal to interference power ratio (SIR)".

e. Claim 60, line 9, delete "and SIR", insert "and signal to interference power ratio (SIR)".

### REASONS FOR ALLOWANCE

1. The following is a statement of reasons for the indication of allowable subject matter: The instant application discloses a communication quality measuring method in CDMA cellular system. Prior art references show similar methods but fail to teach: **“first power calculating step of deriving a desired signal power and an interference signal power in said reception chip timing from a eigenvalue of said covariant matrix”, as in claims 1, 13; “second power calculation step of deriving a desired signal power and an interference signal power by averaging said add vectors and said difference vectors”, as in claims 7, 19; “vector calculation step of calculating difference vector and add vector from difference value and add value of respective received signal vectors of the same reception chip timing in the other received series detected by said correlation detection step and the received series provided delay in said delay step”, as in claims 25, 27, 29, 31; “a desired signal power, an interference signal power and signal to interference power ratio being calculated by deriving add vector and difference vector of two received signal vectors spaced for a plurality of symbol periods per transmission antenna, and performing averaging process of said add vector and said difference vector”, as in claim 57, 60.**

***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 571-272-3047. The examiner can normally be reached on Monday – Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*Cicely Ware*

cqw  
November 23, 2005

  
**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINE**  
**TECHNOLOGY CENTER 2800**